

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. BOX 14	130	
Alexandria	Virginia	22313-1450
www.uspto.		

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,708	03/28/2001	Shawn P. McAllister	1400.4100285	4616
	7590 01/05/200 DER & ASSOCIATES	EXAMINER		
PO BOX 164075			HAN, CLEMENCE S	
AUSTIN, TX 78716-4075			ART UNIT	PAPER NUMBER
			2616	
				,
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	01/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)		
	09/821,708	MCALLISTER ET AL.		
Office Action Summary	Examiner	Art Unit		
	Clemence Han	2616		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailling date of this communication. D (35 U.S.C. § 133).		
Status				
 1) ⊠ Responsive to communication(s) filed on <u>03 Octoor</u> 2a) ⊠ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under Expression. 	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4)	vn from consideration. 2-45 is/are rejected. 6/are objected to.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
•		,		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:			

DETAILED ACTION

Claim Rejections - 35 USC § 102

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. Claim 1-10, 17, 23-25, 30, 31, 33, 35-40 and 42-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Srinivasan et al. (US 6,304,549).

Regarding to claim 1, Srinivasan teaches a method for rerouting a connection in a data communication network, comprising: establishing the connection in the data communication network, wherein the connection is managed by a control plane 105, 200 (Column 7 Line 32-41); monitoring status of a selected characteristic of the connection using a user connection monitoring function 315; and when the status of the selected characteristic is determined to be unacceptable, initiating control plane rerouting of the connection (Column 17 Line 22-25).

Regarding to claim 2, Srinivasan teaches the selected characteristic includes continuity on the connection (Column 17 Line 1-4).

Regarding to claim 3, Srinivasan teaches the selected characteristic includes at least one of: data corruption on the connection, data loss on the connection, latency along the connection, and misinsertion of data on the connection (Column 2 Line 57-61).

Art Unit: 2616

Regarding to claim 4, Srinivasan teaches the data communication network supports asynchronous transfer mode (ATM) protocol (Column 5 Line 2-8).

Regarding to claim 5, Srinivasan teaches the control plane is a signaling plane (Column 5 Line 43 – Column 6 Line 12, see Figure 3).

Regarding to claim 6, Srinivasan teaches the signaling plane uses private network-to-network interface (PNNI) 56.

Regarding to claim 7, Srinivasan teaches the connection is a soft permanent virtual connection (SPVC) (Column 2 Line 32).

Regarding to claim 8, Srinivasan teaches the connection is a switched connection (Figure 1).

Regarding to claim 9, Srinivasan teaches the user connection monitoring function utilizes operation and management (OAM) cells (Column 16 Line 58-62).

Regarding to claim 10, Srinivasan teaches the user connection monitoring function includes OAM continuity checking (Column 16 Line 58-66).

Regarding to claim 17, Srinivasan teaches initiating control plane rerouting of the connection further comprises initiating a soft reroute (Column 17 Line 22-25).

Regarding to claim 23, Srinivasan teaches a data communication network, comprising: a source node (End Host A in Figure 1); a destination node (End Host

B in Figure 1) operably coupled to the source node via a first connection that carries a data stream, wherein the source node injects diagnostic traffic into the data stream, wherein the destination node monitors the diagnostic traffic (OAM in Column 16 Line 58-62) in the data stream; and a control block 50 operably coupled to the source node and the destination node, wherein when status of a selected characteristic associated with the diagnostic traffic is determined to be unacceptable, the control block performs a control plane reroute that establishes a second connection that couples the source node and the destination node (Column 17 Line 22-25).

Regarding to claim 24, Srinivasan teaches the data stream includes a plurality of asynchronous transfer mode (ATM) cells (Column 5 Line 2-8).

Regarding to claim 25, Srinivasan teaches the diagnostic traffic includes operation and management (OAM) continuity checking cells (Column 16 Line 58-66).

Regarding to claim 30, Srinivasan teaches the first and second connections are soft permanent virtual circuits (Column 2 Line 32).

Regarding to claim 31, Srinivasan teaches the first and second connections are switched connections (Figure 1).

Art Unit: 2616

Regarding to claim 33, Srinivasan teaches the control block establishes the second connection as a part of a soft reroute (Column 17 Line 22-25).

Regarding to claim 35, Srinivasan teaches the selected characteristic includes at least one of: data corruption on the first connection, data loss on the first connection, latency along the first connection, and misinsertion of data on the first connection (Column 2 Line 57-61).

Regarding to claim 36, Srinivasan teaches a method for rerouting a connection in an asynchronous transfer mode (ATM) data communication network, comprising: establishing the soft permanent virtual connection (SPVC) in the ATM data communication network (Column 2 Line 32), wherein the connection is managed by a control plane 105, 200 (Column 7 Line 32-41); using operation and management (OAM) cells to monitor at least one characteristic of the connection (Column 16 Line 58-62); and when status of the at least one characteristic is determined to be unacceptable, initiating control plane rerouting of the connection (Column 17 Line 22-25).

Regarding to claim 37, Srinivasan teaches the connection is a soft permanent virtual connection (SPVC) (Column 2 Line 32).

Regarding to claim 38, Srinivasan teaches the connection is switched virtual connection (SVC) (Column 7 Line 61-65).

Application/Control Number: 09/821,708 Page 6

Art Unit: 2616

Regarding to claim 39, Srinivasan teaches the control plane is a signaling plane (Column 5 Line 43 – Column 6 Line 12, see Figure 3).

Regarding to claim 40, Srinivasan teaches the signaling plane uses private network-to-network interface (PNNI) 56.

Regarding to claim 42, Srinivasan teaches a method for rerouting a connection in a data communication network, comprising: detecting a fault in the connection in the user plane 315; and triggering a reroute of the connection in the control plane based on the fault detected (Column 17 Line 22-25).

Regarding to claim 43, Srinivasan teaches detecting a fault further comprises detecting a fault using operation and management (OAM) services running within the user plane (Column 16 Line 58-62).

Regarding to claim 44, Srinivasan teaches the connection is a soft permanent virtual connection (SPVC) (Column 2 Line 32).

Regarding to claim 45, Srinivasan teaches triggering a reroute further comprises triggering a soft reroute (Column 17 Line 22-25).

Response to Arguments

3. Applicant's arguments filed October 03, 2006 have been fully considered but they are not persuasive.

Art Unit: 2616

In page 9, the applicant argues that Srinivasan does not disclose the connection is managed by a control plane. Srinivasan teaches the connection is managed by a control plane (Column 5 Line 59-66).

In page 9, the applicant argues that Srinivasan does not disclose initiating control plane rerouting of the connection. Srinivasan teaches initiating control plane rerouting of the connection (Column 17 Line 22-25).

In page 9, the applicant argues that Srinivasan does not disclose the selected characteristic includes continuity on the connection. Srinivasan teaches the selected characteristic includes continuity on the connection (Column 17 Line 1-4).

In page 10, the applicant argues that Srinivasan does not disclose the selected characteristic includes at least one of: data corruption on the connection, data loss on the connection, latency along the connection, and misinsertion of data on the connection. Srinivasan teaches the selected characteristic includes at least one of: data corruption on the connection, data loss on the connection, latency along the connection, and misinsertion of data on the connection (Column 2 Line 57-61).

In page 10, the applicant argues that Srinivasan does not disclose the data communication network supports asynchronous transfer mode (ATM) protocol.

Art Unit: 2616

Srinivasan teaches the data communication network supports asynchronous transfer mode (ATM) protocol (see the Title of instant reference).

In page 10, the applicant argues that Srinivasan does not disclose the control plane is a signaling plane. Srinivasan teaches the control plane is a signaling plane (Column 2 Line 30-31).

In page 11, the applicant argues that Srinivasan teaches away from such a technique. Srinivasan nevertheless teaches the limitation.

In page 11, the applicant argues that Srinivasan does not disclose OAM continuity checking. Srinivasan teaches OAM continuity checking (Column 16 Line 58-66).

In page 11, the applicant argues that Srinivasan does not disclose a soft reroute. Srinivasan teaches a soft reroute (Column 17 Line 22-25).

In page 12, the applicant argues that Srinivasan does not disclose the source node injects diagnostic traffic into the data stream or the destination node monitors the diagnostic traffic in the data stream. Srinivasan teaches the source node injects diagnostic traffic into the data stream and the destination node monitors the diagnostic traffic (OAM in Column 16 Line 58-62) in the data stream.

In page 12, the applicant argues that Srinivasan does not disclose a control block operably coupled to the source node and the destination node. Srinivasan

Art Unit: 2616

teaches a control block operably coupled to the source node and the destination node (see Figure 4).

In page 12, the applicant argues that Srinivasan does not disclose when status of a selected characteristic associated with the diagnostic traffic is determined to be unacceptable, the control block performs.... Srinivasan teaches when status of a selected characteristic associated with the diagnostic traffic is determined to be unacceptable, the control block performs... (Column 17 Line 22-25).

In page 13, the applicant argues that Srinivasan does not disclose the data stream includes a plurality of asynchronous transfer mode (ATM) cells. Srinivasan teaches the data stream includes a plurality of asynchronous transfer mode (ATM) cells (Column 5 Line 2-8, see the Title of instant reference).

In page 13, the applicant argues that Srinivasan does not disclose OAM continuity checking cells. Srinivasan teaches OAM continuity checking cells (Column 16 Line 58-66).

In page 13, the applicant argues that Srinivasan teaches away from such a technique. Srinivasan nevertheless teaches the limitation.

In page 14, the applicant argues that Srinivasan does not disclose a soft reroute. Srinivasan teaches a soft reroute (Column 17 Line 22-25).

Art Unit: 2616

In page 14, the applicant argues that Srinivasan does not disclose the selected characteristic includes at least one of: data corruption on the first connection, data loss on the first connection, latency along the first connection, and misinsertion of data on the first connection. Srinivasan teaches the selected characteristic includes at least one of: data corruption on the first connection, data loss on the first connection, latency along the first connection, and misinsertion of data on the first connection (Column 2 Line 57-61).

In page 14, the applicant argues that Srinivasan teaches away from such a technique. Srinivasan nevertheless teaches the limitation.

In page 15, the applicant argues that Srinivasan does not disclose initiating control plane rerouting of the connection. Srinivasan teaches initiating control plane rerouting of the connection (Column 17 Line 22-25).

In page 15, the applicant argues that Srinivasan teaches away from such a technique. Srinivasan nevertheless teaches the limitation.

In page 15, the applicant argues that Srinivasan does not disclose the connection is switched virtual connection (SVC). Srinivasan teaches the connection is switched virtual connection (SVC) (Column 7 Line 61-65). For the rejection on the limitations in the claim 36, see the rejection of the claim 36 above.

Art Unit: 2616

In page 16, the applicant argues that Srinivasan does not disclose the control plane is a signaling plane. Srinivasan teaches the control plane is a signaling plane (Column 2 Line 30-31).

In page 16, the applicant argues that Srinivasan does not disclose detecting a fault in the connection in the user plane. Srinivasan teaches detecting a fault in the connection in the user plane 315. 315 can be found not in the Figure 3 but in the Figure 6.

In page 16, the applicant argues that Srinivasan does not disclose triggering a reroute of the connection in the control plane based on the fault detected.

Srinivasan teaches triggering a reroute of the connection in the control plane based on the fault detected (Column 17 Line 22-25).

In page 16, the applicant argues that Srinivasan does not disclose detecting a fault using operation and management (OAM) services running within the user plane. Srinivasan teaches detecting a fault using operation and management (OAM) services running within the user plane (Column 16 Line 58-62).

In page 17, the applicant argues that Srinivasan teaches away from such a technique. Srinivasan nevertheless teaches the limitation.

In page 17, the applicant argues that Srinivasan does not disclose a soft reroute. Srinivasan teaches a soft reroute (Column 17 Line 22-25).

Application/Control Number: 09/821,708 Page 12

Art Unit: 2616

Allowable Subject Matter

4. Claim 11-16, 18-22, 26-29, 32, 34, 41 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/821,708 Page 13

Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Clemence Han Examiner Art Unit 2616

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600